



Technische Universität Berlin



Technische Universität Berlin offers an open position:

Research Assistant - 0.75 working time - salary grade E13 TV-L Berliner Hochschulen

Faculty II - Institute of Optics and Atomic Physics / Terahertz and Laser Spectroscopy

Reference number: II-248/22 (starting at the earliest possible / until 30/04/25 / closing date for applications 20/06/22)

Working field: The research task is focusing on non-linear laser spectroscopy investigations on especially prepared and electrically contacted graphene samples. The work is part of a project within the frame of the DFG priority program „INtegrated TERahertz sySTems Enabling Novel Functionality (INTEREST)“. The project, which is carried out with 2 project partner aims at demonstrating a new Terahertz technology platform, based on the integration of graphene with novel electronic SiGe HBT/BiCMOS chip technology. A Terahertz Time-Domain Spectroscopy set-up for nonlinear Terahertz spectroscopy shall be further developed and optimized. Thereafter this set-up shall be utilized to investigate the suitability of differently prepared/designed graphene samples with respect to Terahertz high harmonic generation or difference frequency mixing. A part of the experiments shall be performed at different accelerator-based high-field Terahertz light sources. The experimental results shall be compared with suitable model calculations for the non-linear dynamics of the involved Dirac electrons. Possibility to prepare a PhD degree.

Requirements: Successfully completed university degree (Master, Diplom or equivalent) in physics or a related field; fundamental knowledge in applied Optics; capability to work in an interdisciplinary, international team; first practical experiences in programming with Python or LabVIEW are of advantage. Good command of German and/or English is required; willingness to learn either English or German is expected.

For further information please contact Prof. Dr. Michael Gensch (Tel.: +49 (0)30 314-26644, E-Mail: michael.gensch@tu-berlin.de).

Please send your application with the **reference number** and the appropriate documents (combined in a single pdf file, max 5 MB) **by email to Prof. Dr. Michael Gensch (michael.gensch@tu-berlin.de)**.

By submitting your application via email you consent to having your data electronically processed and saved. Please note that we do not provide a guarantee for the protection of your personal data when submitted as unprotected file. Please find our data protection notice acc. DSGVO (General Data Protection Regulation) at the TU staff department homepage: https://www.abt2-t.tu-berlin.de/menue/themen_a_z/datenschutzerklaerung/ or quick access 214041.

To ensure equal opportunities between women and men, applications by women with the required qualifications are explicitly desired. Qualified individuals with disabilities will be favored. The TU Berlin values the diversity of its members and is committed to the goals of equal opportunities.

Technische Universität Berlin - Die Präsidentin - , **Fakultät II, Institut für Optik und Atomare Physik, Prof. Dr. Michael Gensch, Sekr. ER 1-1, Hardenbergstraße 36, 10623 Berlin**

The vacancy is also available on the internet at <https://www.personalabteilung.tu-berlin.de/menue/jobs/>

